



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,946	01/09/2001	Leon Bruckman	6727/01145	6186

7590 03/21/2005

DARBY & DARBY P.C.  
805 Third Avenue  
New York, NY 10022

EXAMINER
----------

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/756,946

Applicant(s)

BRUCKMAN, LEON

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10-08-04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

Claim 32 is objected to because of the following informalities:

Claim 32 is indicated as depending from claim 30. However, claim 30 is a  
5 method claim and claim 32 is directed towards a network claim. Further, applicant  
indicates that claim 32 is to depend from claim 31 in REMARKS, page 10, second to  
last paragraph. Therefore, claim 32 should be changed to depend from claim 31.  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

10 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set  
forth in section 102 of this title, if the differences between the subject matter sought to be patented and  
the prior art are such that the subject matter as a whole would have been obvious at the time the  
invention was made to a person having ordinary skill in the art to which said subject matter pertains.  
Patentability shall not be negated by the manner in which the invention was made.

20 Claims 1-3, 5-8, 1, 11, 13, 14, 25, 29, and 31 are rejected under 35 U.S.C.  
103(a) as being unpatentable over U.S. Patent 5,461,611, Drake, Jr. et al. (Drake) in  
view of U.S. Patent 6,639,893 B1, Chikenji et al. (Chikenji).

25 Regarding claims 1 and 31, Drake discloses, "a communication network,  
comprising: a plurality of nodes, comprising at least first and second nodes (figure 1,  
elements 10 and 29 correspond to first and second nodes); a plurality of links,

interconnecting the nodes to provide communications therebetween (figure 1 where there are links connecting the nodes); and a dispatcher, which is adapted to allocate a respective number of quanta of one or more resources in the network to each of the nodes (figure 1, element 20 allocates resources based on different quanta desired by each node as read in col. 4, lines 49-54), wherein the first node is adapted, upon receiving a request to use a portion of the resources so as to carry the data flow between the first and second nodes over one of a plurality of paths therebetween, each such path comprising a respective sequence of the links (col. 10, lines 43-46), to direct the data flow from the first node to the second node over one of the paths if the resources already allocated to the first node on the one of the paths are sufficient (col. 10, lines 46-51 where if there enough resources the path is established and resources granted), and to request an increase in an allocation of the requested resources to the first node if the resources already allocated to the first node are insufficient (col. 12, lines 35-67 and figure 7), and wherein the dispatcher is adapted to determine, for the links comprised in each of the paths, respective levels of use of the requested resources due to communications in progress over the network (col. 11, lines 13-17 where the known bandwidth represents the communications in progress and the bandwidth subtracted from that represents the requested resources), and to increase the allocation of the resources to the first node on the selected path by a predetermined quantum (col. 12, lines 60-67)."

However, Drake lacks what Chikenji discloses, "to select which of the paths is to carry the data flow responsive to the determined levels of use of the

Art Unit: 2661

requested resources on the links comprised in each of the paths (col. 11, lines 35-63 (emphasis on lines 58-63) where the "path selection means", when taken in the context of a switch (node) on the transmission line, uses "the smallest weight" to select the path, i.e. the path selection means chooses the path based on the largest amount of free  
5 bandwidth)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the selecting of paths with the rest of the method for the purpose of distributing data communications as evenly as possible across paths (Chikenji, col. 11, lines 58-63 where it is implied that by selecting a path with the smallest capacity used,  
10 other, more utilized paths, will not be overused). The motivation for evenly distributing data over the given paths is so that the system does not have some paths overburdened while others are underutilized.

Regarding claim 2, Drake and Chikenji disclose the method of claim 1. However,  
15 Drake explicitly lacks what Chikenji further discloses, "the network comprises an Internet Protocol (IP) network (col. 26, lines 27-29)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the IP network with the method of claim 1 for the same reasons and motivation as in claim 1.

20 Regarding claim 3, Drake and Chikenji disclose the method of claim 1. However, Drake lacks what Chikenji further discloses, "the nodes are interconnected in a ring, and wherein the plurality of paths comprises a first path traversing the ring in one direction

and a second path traversing the ring in the opposite direction (figure 13, Ring Network C shows two dotted paths that flow in opposite directions), and wherein selecting which of the paths is to carry the data flow comprises selecting the first or the second path (figure 13 in combination with col. 11, lines 35-64 where are only the two paths to select from in figure 13 and thus the path selection means must choose between these two).”

It would have been obvious to one with ordinary skill in the art at the time of invention to include the first and second paths with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 5, Drake and Chikenji disclose the method of claim 1. However, Chikenji lacks what Drake further discloses, “the one or more resources comprise a link bandwidth (col. 11, lines 13-17 whereby calculating a bandwidth by subtracting the requested or allocated bandwidth from the remaining bandwidth says that the link must have its own finite bandwidth).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the link bandwidth with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 6, Drake and Chikenji disclose the method of claim 1. However, Chikenji lacks what Drake further discloses, “the one or more resources comprise a processing power associated with each of the links (figure 1 and col. 11, lines 13-17 both suggest that each link has to have a processing power associated with it, as is known in the art all nodes (such as those in figure 1) have processors attached to them

Art Unit: 2661

and each have a finite amount of processing power devoted to each communication link coming in and going out of the node, further to calculate the remaining bandwidth of a link, a processor must do that calculation and thus each link will have some processing power associated with it at some time)." It would have been obvious to one with ordinary

5 skill in the art at the time of invention to include the processing power associated with each of the links with the method of claim 1 for the same reasons and motivation as in claim 1.

Regarding claim 7, Drake and Chikenji disclose the method of claim 1. However,

10 Chikenji lacks what Drake further discloses "wherein selecting which of the paths is to carry the data flow comprises comparing an amount of the one or more resources requested to a resource budget assigned to the first node, and permitting the data flow only if allocating the requested resources will not cause a total of the resources allocated to the first node to exceed the budget (col. 11, lines 4-10 where Drake is

15 saying that since the requested QoS bandwidth requirement is within the bounds of the available bandwidth, or the resource budget, the data flow can be permitted because the requested resources will not exceed the available bandwidth)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the permitting the data flow if the requested resources were within the resource budget for

20 the same reasons and motivation as in claim 1.

Regarding claim 8, Drake and Chikenji disclose the method of claim 7. However, Chikenji lacks what Drake further discloses, "comparing the amount of the one or more resources comprises comparing the amount of each of the resources requested to the resource budget assigned for each of the resources, and wherein permitting the data

5 flow comprises permitting the flow only if all of the resources requested for at least one of the paths are within the budget (col. 11, lines 4-10 where each component of the path is compared to see if the available bandwidth will be adequate for the requested resource, if all paths are adequate the flow is permitted as seen in figure 5, elements 91, 82)." It would have been obvious to one with ordinary skill in the art at the time of

10 invention to include the comparing of each path component to determine if the path is within the budget with the method of claim 7 for the same reasons and motivation as in claim 7.

Regarding claim 10, Drake and Chikenji disclose the method of claim 1.

15 However, Chikenji lacks what Drake further discloses, "selecting which of the paths is to carry the data comprises verifying that a sufficient amount of the requested resources is available to carry the data flow on every one of the links comprised in the selected path (col. 11, lines 4-10 where determining if the requested QoS is within the available resources is the same as verifying that a sufficient amount of resources are available to

20 carry the data)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the verifying of the resources with the method of claim 1 for the same reasons and motivation as in claim 1.



Regarding claims 11 and 25, Drake and Chikenji disclose the method of claim 1 and the network of claim 31. However, Drake lacks what Chikenji further discloses, "selecting which of the paths is to carry the data flow comprises selecting the one of the  
5 paths having the lowest level of a predetermined measure of use of the requested resources (col. 11, lines 58-63 whereby selecting the smallest weight in Chikenji suggests that the lowest level of the resources in use, or the smallest weight, is used to select the path)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the lowest level of resources in use as a criterion for  
10 selection with the method of claim 1 and the network of claim 31 for the same reasons and motivation as in claims 1 and 31.

Regarding claim 13, Drake and Chikenji disclose the method of claim 1. However, Chikenji lacks what Drake further discloses, "receiving the request comprises  
15 choosing a dispatcher within the network to manage allocation of the resources, wherein the dispatcher receives and processes the request (figure 1, node 20 acts as the dispatcher to allocate the resources of the network)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the dispatcher with the method of claim 1 for the same reasons and motivation as in claim 1.

20  
Regarding claim 14, Drake and Chikenji disclose the method of claim 13. However, Chikenji lacks what Drake further discloses, "choosing the dispatcher

comprises choosing one of the nodes to act as the dispatcher (figure 1, node 20 again acts as the dispatcher as in claims 13 and 27).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the dispatcher as a node with the method of claim 13 for the same reasons and motivation as in claim 13.

5

Regarding claim 29, Drake and Chikenji disclose the method of claim 13.

However, Chikenji lacks what Drake further discloses, “wherein requesting the increase in the allocation comprises requesting and receiving the allocation from the dispatcher (col. 4, lines 49-56).” It would have been obvious to one of ordinary skill in the art at the  
10 time of invention to include the requesting of the increase and the allocation by the dispatcher for the same reasons and motivation as in claim 13.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake, Jr. et al. and Chikenji et al. as applied to claim 3 above, and further in view of applicant's  
15 admitted prior art (AAPA).

Regarding claim 4, Drake and Chikenji disclose the method of claim 3. However, both Drake and Chikenji lack what AAPA discloses, “conveying the data flow over an inner or outer data link ring within the network provided by a Spatial Reuse Protocol (SRP) (Specification, page 1, lines 17-page 2, lines 1-2).” It would have been obvious to  
20 one with ordinary skill in the art to convey the data using an SRP for the purpose of allowing node to use different parts of the same ring simultaneously. The motivation for

Art Unit: 2661

this being that more than one node can use the ring at any given time, thus increasing throughput and efficiency.

Claims 9, 12, 15-17, 19-24, and 26-28 are rejected under 35 U.S.C. 103(a) as  
5 being unpatentable over Drake et al. in view of Chikenji et al. and in further view of U.S. Patent 6,262,976 B1, McNamara.

Regarding claim 26, Drake and Chikenji disclose the network of claim 25.  
However, Drake and Chikenji lack what McNamara discloses, "wherein the measure of  
10 use comprises, for each of at least two of the paths, a maximum level of use of at least one of the requested resources, taken over all of the links comprised in the paths (col. 53, lines 54-59 where the capacity available to the link is the maximum level of a use of a resource on that link, further the lowest capacity of the resources available is the one that is selected)." It would have been obvious to one of ordinary skill in the art at the  
15 time of invention to include the selecting the lowest level of a resource out of the maximum levels of the resources available for the purpose of limiting the capacity of the system to that of the lowest available link. The motivation for doing this is so that the higher capacity links do not waste bandwidth by using it in conjunction with the lowest available capacity link (McNamara, col. 53, lines 59-64).

20  
Regarding claims 12 and 15, Drake discloses, "a communication network, comprising: a plurality of nodes (figure 1, elements 10 and 29 correspond to first and

second nodes); a plurality of links, interconnecting the nodes to provide communications therebetween (figure 1 where there are links connecting the nodes); and a dispatcher, coupled to receive a request to allocate one or more resources in the network (col. 10, lines 43-46 where the allocator 26 is located in the dispatcher) so as to carry the data  
5 flow between first and second ones of the nodes over one of a plurality of paths therebetween, each such path comprising a respective sequence of the links (figure 1 shows the nodes and links as previously described), and adapted to determine, for the links comprised in each of the paths, respective levels of use of the requested resources due to communications in progress over the network (col. 11, lines 13-17  
10 where the known bandwidth represents the communications in progress and the bandwidth subtracted from that represents the requested resources)..."

However, Drake lacks what Chikenji discloses "...to select which of the paths is to carry the data flow responsive to the determined levels of use of the requested resources on the links comprised in each of the paths (col. 11, lines 35-63 (emphasis on  
15 lines 58-63) where the "path selection means", when taken in the context of a switch (node) on the transmission line, uses "the smallest weight" to select the path, i.e. the path selection means chooses the path based on the largest amount of free bandwidth), wherein the dispatcher is adapted to select for carrying the data flow the one of the paths that has the lowest level of a predetermined measure of use of the requested  
20 resources (col. 11, lines 58-63 whereby selecting the smallest weight in Chikenji suggests that the lowest level of the resources in use, or the smallest weight, is used to select the path)."

It would have been obvious to one with ordinary skill in the art at the time of invention to include the selecting of paths with the rest of the network for the purpose of distributing data communications as evenly as possible across paths (Chikenji, col. 11, lines 58-63 where it is implied that by selecting a path with the smallest capacity used, other, more utilized paths, will not be overused). The motivation for evenly distributing data over the given paths is so that the system does not have some paths overburdened while others are underutilized.

Drake and Chikenji further lack however, what McNamara discloses, "wherein the measure of use comprises, for each of at least two of the paths, a maximum level of use of at least one of the requested resources, taken over all of the links comprised in the paths (col. 53, lines 54-59 where the capacity available to the link is the maximum level of a use of a resource on that link, further the lowest capacity of the resources available is the one that is selected)."

It would have been obvious to one of ordinary skill in the art at the time of invention to include the selecting the lowest level of a resource out of the maximum levels of the resources available for the purpose of limiting the capacity of the system to that of the lowest available link. The motivation for doing this is so that the higher capacity links do not waste bandwidth by using it in conjunction with the lowest available capacity link (McNamara, col. 53, lines 59-64).

Regarding claim 16, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Drake and McNamara explicitly lack what Chikenji further discloses,

"the network comprises an Internet Protocol (IP) network (col. 26, lines 27-29)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the IP network with the network of claim 15 for the same reasons and motivation as in claim 15.

5

Regarding claim 17, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Drake and McNamara lack what Chikenji further discloses, "the nodes are interconnected in a ring, and wherein the plurality of paths comprises a first path traversing the ring in one direction and a second path traversing the ring in the  
10 opposite direction (figure 13, Ring Network C shows two dotted paths that flow in opposite directions), and wherein selecting which of the paths is to carry the data flow comprises selecting the first or the second path (figure 13 in combination with col. 11, lines 35-64 where are only the two paths to select from in figure 13 and thus the path selection means must choose between these two)." It would have been obvious to one  
15 with ordinary skill in the art at the time of invention to include the first and second paths with the network of claim 15 for the same reasons and motivation as in claim 15.

Regarding claim 19, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses, "the one  
20 or more resources comprise a link bandwidth (col. 11, lines 13-17 whereby calculating a bandwidth by subtracting the requested or allocated bandwidth from the remaining bandwidth says that the link must have its own finite bandwidth)." It would have been

obvious to one with ordinary skill in the art at the time of invention to include the link bandwidth with the network of claim 15 for the same reasons and motivation as in claim 15.

5           Regarding claim 20, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses, "the one or more resources comprise a processing power associated with each of the links (figure 1 and col. 11, lines 13-17 both suggest that each link has to have a processing power associated with it, as is known in the art all nodes (such as those in figure 1)  
10   have processors attached to them and each have a finite amount of processing power devoted to each communication link coming in and going out of the node, further to calculate the remaining bandwidth of a link, a processor must do that calculation and thus each link will have some processing power associated with it at some time)." It would have been obvious to one with ordinary skill in the art at the time of invention to  
15   include the processing power associated with each of the links with the network of claim 15 for the same reasons and motivation as in claim 15.

          Regarding claim 21, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses "wherein  
20   selecting which of the paths is to carry the data flow comprises comparing an amount of the one or more resources requested to a resource budget assigned to the first node, and permitting the data flow only if allocating the requested resources will not cause a

total of the resources allocated to the first node to exceed the budget (col. 11, lines 4-10 where Drake is saying that since the requested QoS bandwidth requirement is within the bounds of the available bandwidth, or the resource budget, the data flow can be permitted because the requested resources will not exceed the available bandwidth)." It

5 would have been obvious to one with ordinary skill in the art at the time of invention to include the permitting the data flow if the requested resources were within the resource budget for the same reasons and motivation as in claim 15.

Regarding claim 22, Drake, Chikenji, and McNamara disclose the network of  
10 claim 21. However, Chikenji and McNamara lack what Drake further discloses,  
"comparing the amount of the one or more resources comprises comparing the amount of each of the resources requested to the resource budget assigned for each of the resources, and wherein permitting the data flow comprises permitting the flow only if all of the resources requested for at least one of the paths are within the budget (col. 11,  
15 lines 4-10 where each component of the path is compared to see if the available bandwidth will be adequate for the requested resource, if all paths are adequate the flow is permitted as seen in figure 5, elements 91, 82)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the comparing of each path component to determine if the path is within the budget with the network of claim  
20 21 for the same reasons and motivation as in claim 21.



Regarding claims 9 and 23, Drake, Chikenji, and McNamara disclose the method of claim 12 and the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses, "increasing an allocation to the first node of the one or more requested resources on the selected path by a predetermined quantum (figure 7, element where any node can request an increase in the bandwidth resource by a given amount)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the increasing of the resources by a predetermined quantum for the same reasons and motivation as in claims 12 and 15.

Regarding claim 24, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses, "selecting which of the paths is to carry the data comprises verifying that a sufficient amount of the requested resources is available to carry the data flow on every one of the links comprised in the selected path (col. 11, lines 4-10 where determining if the requested QoS is within the available resources is the same as verifying that a sufficient amount of resources are available to carry the data)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the verifying of the resources with the network of claim 15 for the same reasons and motivation as in claim 15.

Regarding claim 27, Drake, Chikenji, and McNamara disclose the network of claim 15. However, Chikenji and McNamara lack what Drake further discloses,

“receiving the request comprises choosing a dispatcher within the network to manage allocation of the resources, wherein the dispatcher receives and processes the request (figure 1, node 20 acts as the dispatcher to allocate the resources of the network).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the dispatcher with the network of claim 15 for the same reasons and motivation as in claim 15.

Regarding claim 28, Drake, Chikenji, and McNamara disclose the network of claim 27. However, Chikenji and McNamara lack what Drake further discloses, “wherein the dispatcher is operative as a software process running on the associated node (figure 1, node 20 has elements, such as 22-25 that indicate it is a node that uses software to run the allocation of resources).” It would have been obvious to one with ordinary skill in the art at the time of invention to include the dispatcher as a node with the network of claim 27 for the same reasons and motivation as in claim 27.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drake, Jr. et al., Chikenji et al., and McNamara as applied to claim 17 above, and further in view of applicant's admitted prior art (AAPA).

Regarding claim 18, Drake, Chikenji, and McNamara disclose the network of claim 17. However, Drake, Chikenji, and McNamara lack what AAPA discloses, “conveying the data flow over an inner or outer data link ring within the network provided by a Spatial Reuse Protocol (SRP) (Specification, page 1, lines 17-page 2, lines 1-2).” It

would have been obvious to one with ordinary skill in the art to convey the data using an SRP for the purpose of allowing node to use different parts of the same ring simultaneously. The motivation for this being that more than one node can use the ring at any given time, thus increasing throughput and efficiency.

5

Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drake et al. and Chikenji et al. as applied to claims 1 and 31 respectively as above, and further in view of U.S. Patent 5,706,516, Chang et al. (Chang).

Regarding claims 30 and 32, Drake and Chikenji disclose the method of claim 1  
10 and the network of claim 31. However, Drake and Chikenji lack what Chang discloses, “wherein the first node is adapted, upon release of the requested resources, to compare an amount of the resources that have been released to a predetermined threshold, and if the amount is greater than the predetermined threshold, to deallocate the predetermined quantum from the first node (col. 11, lines 33-40 where the tokens  
15 represent resources because they allow a given agent to use the resources while in possession of the tokens and once the resources have exceeded a given threshold they are released).” It would have been obvious to one of ordinary skill in the art to include the releasing of resources once a given threshold has been reached for the purpose of monitoring the resources used by any given node at a time. The motivation for doing  
20 this would be so that the resources are shared fairly among all nodes by not allowing a single node to use all the resources.

***Response to Arguments***

Applicant's arguments, see REMARKS, page 8, paragraph 2, filed 26 October 2004, with respect to the objections of claims 1 and 15 have been fully considered and are persuasive. The objections of claims 1 and 15 have been withdrawn.

5

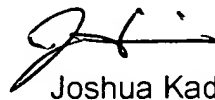
Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the  
10 examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
20 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**BOB PHUNKULH**  
**PRIMARY EXAMINER**

  
Joshua Kading